

REMARKS

The Examiner's Action mailed on March 01, 2006 has been received and its contents carefully considered. In this Amendment, Applicants have amended claims 1 and 8, and also editorially amended the specification to make certain cosmetic changes to correct issues noted during review of the application. Claims 1 and 8 are independent claims. After entry of the above-amendments, claims 1-10 remain pending in the application. For at least the following reasons, it is submitted that this application is in condition for allowance.

Claims 8-9 were tentatively rejected under 35 U.S.C. § 102(e) as allegedly anticipated by *Fujino* (U.S. Patent No. 6,809,785B2). For at least the following reasons, Applicants respectfully disagree and request reconsideration and withdrawal of the rejections.

It is well settled that a reference may anticipate a claim within the purview of 35 USC §102 only if all the features and all the relationships recited in the claim are taught by the reference either by clear disclosure or under the principle of inherency. However, the cited reference *Fujino* (U.S. Patent No. 6,809,785B2) does not disclose certain features recited in independent claim 8 (as amended).

First, Applicant's amended independent claim 8 recites a manufacturing method of a transfective TFT-LCD panel equipped with a transmissive area and a reflective area. The method comprises the following steps. First, a thin film transistor and a capacitor electrode are formed on the substrate, and a photo-reflective layer within the reflective area and a source and a drain of the thin film transistor are formed simultaneously, wherein the photo-reflective layer and the drain are discrete. Next, a transparent electrode is formed within the transmissive area to electrically connect the photo-reflective layer and the drain.

In contrast, *Fujino* discloses a method involving a process of forming the reflecting electrode 10 directly touch and electrically connect the drain (Col. 8, lines 39-50 & FIG. 1E).

Thus, in the Fujino's disclosed structure, the drain directly connects the reflecting electrode 10 through the hole H1, and the drain is electrically connected to the transparent electrode 9 through the reflecting electrode 10. *Fujino* fails to disclose or suggest, even teach away, that **the photo-reflective layer and the drain are discrete, and the photo-reflective layer is electrically connected to the drain by the transparent electrode**, as recited in amended claim 8 of the present invention. As such, it is submitted that Applicant's amended claim 8, as well as the claims 9-10 dependent therefrom, are not anticipated by (or rendered obvious by) the cited reference *Fujino* (6,809,785). For at least this reason, this rejection should be withdrawn.

Claims 1-7 and 10 were tentatively rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over *Dohjo* (U.S. Patent No. 6,078,366) in view of *Fujino* (U.S. Patent No. 6,809,785B2). For at least the following reasons, Applicants respectfully disagree and request reconsideration and withdrawal of the rejections.

In independent claim 1 (as amended), a manufacturing method of a **transflective** TFT-LCD panel is defined. In this method, a first conductive layer is formed on a substrate, and the first conductive layer is then patterned to form a gate. A dielectric layer is formed on the substrate to cover the gate, and a channel is formed on the dielectric layer and disposed over the gate. Then, a photo-resist block is formed, and a second conductive layer is formed to cover the channel and the photo-resist block. Next, the second conductive layer is patterned to form a source, a drain and a photo-reflective layer, wherein the source and the drain are disposed above the gate, and the photo-reflective layer is formed on the photo-resist block, and **the drain and the photo-reflective layer are discrete**. After the second conductive layer is patterned, a protection layer is formed to cover the source, the drain and the photo-reflective layer. Then, the protection layer is patterned to form a first opening on the drain allowing part of the drain to be

exposed, and a second opening on the photo-reflective layer allowing part of the photo-reflective layer to be exposed. Thereafter, a transparent electrode is formed to electrically connect to the drain and the photo-reflective layer via the first opening and the second opening. In contrast, neither *Dohjo* (6,078,366) nor *Fujino* (6,809,785B2) disclose that the drain and the photo-reflective layer are discrete.

The Office Action alleged that “*Dohjo* (6,078,366) teaches the claimed invention except the simultaneous formation of the source, the drain and the reflecting electrode, and it would have been obvious to one of ordinary skill in the art at the time of invention combine 336 with 785 in order to reduce the number of manufacturing steps”. However, there is **no any reflecting electrode** in *Dohjo*’s disclosure. In contrast, *Dohjo* fails to disclose (or even to suggest) the photo-resist block and the photo-reflective layer (225, made of metal), as the present invention discloses. *Dohjo* fails to disclose (or even to suggest) a manufacturing method of a **transflective** TFT-LCD panel. Instead, *Dohjo* discloses a method of manufacturing an optical **transmissive** LCD. This suggested combination of references would require a substantial reconstruction or redesign of the elements shown in *Dohjo* as well as a change in the field under which the *Dohjo* construction was designed to operate. Accordingly, the suggested combination of references would be too substantial to have been obvious. As such, there is no motivation to combine these cited references, and it is submitted that Applicant’s independent claim 1, as well as the claims 2-7 dependent therefrom, are not rendered obvious by *Dohjo* (6,078,366) in view of *Fujino* (6,809,785). For at least this reason, the rejection should be withdrawn.

As a separate and independent basis for the patentability of claims 1-7 and 10, Applicants respectfully traverse the rejections as failing to identify a proper basis for combining the cited references. In combining these references, the Office Action stated only that the combination

would have been obvious to “combine the 366 with 785 in order to reduce the number of manufacturing steps.” (Office Action, page 3). This alleged motivation is clearly improper in view of well-established Federal Circuit precedent.

It is well-settled law that in order to properly support an obviousness rejection under 35 U.S.C. § 103, there must have been some teaching in the prior art to suggest to one skilled in the art that the claimed invention would have been obvious. W. L. Gore & Associates, Inc. v. Garlock Thomas, Inc., 721 F.2d 1540, 1551 (Fed. Cir. 1983). More significantly,

“The consistent criteria for determination of obviousness is whether the prior art would have suggested to one of ordinary skill in the art that this [invention] should be carried out and would have a reasonable likelihood of success, viewed in light of the prior art. ...” Both the suggestion and the expectation of success must be founded in the prior art, not in the applicant's disclosure... In determining whether such a suggestion can fairly be gleaned from the prior art, the full field of the invention must be considered; for the person of ordinary skill in the art is charged with knowledge of the entire body of technological literature, including that which might lead away from the claimed invention.”

(*Emphasis added.*) In re Dow Chemical Company, 837 F.2d 469, 473 (Fed. Cir. 1988).

In this regard, Applicant notes that there must not only be a suggestion to combine the functional or operational aspects of the combined references, but that the Federal Circuit also requires the prior art to suggest both the combination of elements and the structure resulting from the combination. Stiftung v. Renishaw PLC, 945 Fed.2d 1173 (Fed. Cir. 1991). Therefore, in order to sustain an obviousness rejection based upon a combination of any two or more prior art references, the prior art must properly suggest the desirability of combining the particular elements to derive a transreflective thin film transistor LCD (and manufacturing method), as claimed by the Applicant.

When an obviousness determination is based on multiple prior art references, there must be a showing of some “teaching, suggestion, or reason” to combine the references. Gambro Lundia AB v. Baxter Healthcare Corp., 110 F.3d 1573, 1579, 42 USPQ2d 1378, 1383 (Fed. Cir.

1997) (also noting that the “absence of such a suggestion to combine is dispositive in an obviousness determination”).

Evidence of a suggestion, teaching, or motivation to combine prior art references may flow, inter alia, from the references themselves, the knowledge of one of ordinary skill in the art, or from the nature of the problem to be solved. See In re Dembiczak, 175 F.3d 994, 1000, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999). Although a reference need not expressly teach that the disclosure contained therein should be combined with another, the showing of combinability, in whatever form, must nevertheless be “clear and particular.” Dembiczak, 175 F.3d at 999, 50 USPQ2d at 1617.

If there was no motivation or suggestion to combine selective teachings from multiple prior art references, one of ordinary skill in the art would not have viewed the present invention as obvious. See In re Dance, 160 F.3d 1339, 1343, 48 USPQ2d 1635, 1637 (Fed. Cir. 1998); Gambro Lundia AB, 110 F.3d at 1579, 42 USPQ2d at 1383 (“The absence of such a suggestion to combine is dispositive in an obviousness determination.”).

Significantly, where there is no apparent disadvantage present in a particular prior art reference, then generally there can be no motivation to combine the teaching of another reference with the particular prior art reference. Winner Int’l Royalty Corp. v. Wang, No 98-1553 (Fed. Cir. January 27, 2000).

For at least the additional reason that the Office Action failed to identify proper motivations or suggestions for combining the various references to properly support the rejections under 35 U.S.C. § 103, those rejections should be withdrawn.

CONCLUSION

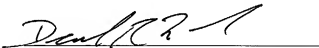
For at least the foregoing reasons, it is submitted that this application is in condition for allowance and such a Notice, with allowed claims 1-10 earnestly is solicited.

If the Examiner believes that a conference would be of value in expediting the prosecution of this application, the Examiner is hereby invited to telephone the undersigned counsel to arrange for such a conference.

No fee is believed to be due in connection with this amendment and response to Office Action. If, however, any fee is believed to be due, you are hereby authorized to charge any such fee to deposit account No. 20-0778.

Respectfully submitted,

By:


Daniel R. McClure
Registration No. 38,962

Thomas, Kayden, Horstemeyer & Risley, LLP
100 Galleria Pkwy, NW
Suite 1750
Atlanta, GA 30339
770-933-9500